

Pearson and Mastering educator study

A look at how Pearson and Mastering support student learning over OER.

Key findings:

- High quality artwork, diagrams, and animations help students solidify knowledge that will translate to success in clinicals.
- Better textbook that delivers concepts in a concise way thus encouraging students to read without feeling overwhelmed.
- Dynamic Study Modules prepare students for discussion in class and help develop a deeper understanding of concepts.
- Students are better set up for success in A&P II.
- Top-notch customer support that facilitates a smooth course delivery.

About the courses

Anatomy & Physiology (A&P) I and II are 3 credit hour courses required for most allied health programs. While some programs only require A&P I, those enrolling in nursing, respiratory therapy, physical therapy assistant, occupational therapy assistant, medical assistance and paramedic programs all require A&P I and II. Successful completion of A&P II is necessary to progress into clinicals. Coverage in A&P I highlights the integumentary, skeletal, and muscular systems through to the nervous system, with the majority of the focus being on anatomy. A&P II picks up at the autonomic nervous system and continues throughout the rest of the human systems, focusing almost exclusively (about 70%) on physiology concepts.



School name: Community College, Southern United States



Course name: Anatomy & Physiology I and II



Course format: Online, face to face and hybrid



Course materials: *Human Anatomy & Physiology, Pearson, 2nd Edition* by Amerman; Mastering A&P



Timeframe: 2020



Educator: Ty Bryan, Professor and Assistant Dean

Challenges and Goals

Ty Bryan is a professor and Assistant Dean at a community college in Southern United States. Throughout his career at this college, he used many different textbooks and publishers in his A&P courses. In schoolyear 2016/2017, his department switched from McGraw Hill to an OER resource called OpenStax in an effort to reduce the cost of textbooks. Once adopted, faculty further reviewed the OER textbook and found it lacking in artwork and diagrams, as well being heavily bogged down with unnecessary content.

“(OER) is really too wordy and our students don’t read that much. You can tell it is written by multiple authors at multiple times. Therefore, the continuity between the chapters was really, really off. It was really disjunct, disjointed.”

His main goal for his students is to ensure they develop a solid foundation of anatomy and physiology concepts in order to be successful in clinicals. Faculty found the OER textbook was not instrumental in helping students achieve that goal, so in early 2020 faculty compared a variety of textbooks and publishers and decided upon Pearson’s *Human Anatomy & Physiology, 2nd Edition* by Amerman along with Mastering. They landed on Pearson because of the superior way it was written and its concise, well laid out material.

Implementation

Anatomy & Physiology I and II are traditionally taught face-to-face, but due to the pandemic, course models had to be shifted. In response, courses had to be taught fully online, which meant faculty needed their Pearson textbook earlier than anticipated. *“We had already decided we were going to go with Pearson in the Fall of 2020...I started contacting Pearson asking them if there was something we could give students who had been fully face-to-face and now had to be fully online. (Pearson) was so generous. (They) gave us Mastering and MyLab. (They) got us through that sticky situation.”* Courses are currently taught online, face-to-face and hybrid, with Bryan hoping courses eventually return to strictly face-to-face as he finds his students learn best when they have a connection with the instructor and other students. Face-to-face classes meet for 50 minutes three times per week or an hour and fifteen minutes twice per week. For face-to-face night classes, they meet once per week for two and a half hours. Hybrid classes meet 50 minutes per week on campus, while the rest of the class is taught online. Online classes vary widely depending on the instructor. There are an average of 35 students per section but can occasionally reach 50 students. Bryan prefers a section closer to 35 students

as it allows the students more familiarization with the instructor which helps them feel confident to speak up in class. On top of lecture hours, there is also a lab component, with the options to take them separately or integrated during lecture. His non-traditional students are made up of about half full-time and half part-time, with the average age being 28.

While Bryan incorporates Mastering content as optional for extra credit, he does strongly encourage its use and explains to his students its many benefits. He narrows down the sections from each chapter he wants them to read and includes Dynamic Study Modules. He tells his students:

“Look at the animations. Somebody has spent an awful lot of time putting in excellent, excellent animations in Mastering. Look at the test question banks, the practice tests...use those.”

—Ty Bryan, Professor and Assistant Dean

Outside of optional Mastering content, Bryan’s assessments in A&P I include four quizzes, six lecture exams and one standardized final exam. Students must receive a minimum of 50% on the final exam to pass the course.

Bryan explains that while he offers extra credit for completion of Dynamic Study Modules, other instructors are free to implement Mastering however they feel best benefits their students. He estimates the vast majority of the online instructors utilize Mastering as part of students’ final grades, while about half of the face-to-face instructors do as well.



Assessments

- 75% Lecture exams (6)
- 20% Final Exam
- 5% Quizzes (4)

The Instructor Experience

Switching from OER to Pearson has been invaluable for students, according to Bryan. One of the main benefits is the improvement in artwork quality. OER lacked detailed artwork that is so crucial for students in A&P courses. This is especially true for anatomy. It is critical for students to see and understand the relative position of human components next to one another. In order to solidify this knowledge, students need to have a clear image with locations and positions.

“One big factor that turned us off OER was the artwork. It’s mediocre at best and it doesn’t show the detail that you’re getting...with Amerman. (Amerman) is really good. Somebody spent a lot of time going through that, making that good quality artwork.”

When it comes to physiology, there are superior diagrams in the Pearson text. *“There are diagrams that show physiological processes from start to finish and those are fabulous. It’s a great way to get those physiology concepts to students.”*

Another highlight for Bryan is the readability of the Pearson text. He believes his students are better understanding concepts with the Pearson text because it’s concise and easy to navigate without being too tied down with unnecessary and disjointed material. While he has not seen an increase in student performance since adopting Pearson and Mastering, he feels this is due to the pandemic and the shift to

fully online courses. Now that they are slowly transitioning back to some face-to-face classes, he can see students are grasping concepts in the way they respond during lectures and class discussions.

“In lectures, I am one of those instructors that asks questions. You can’t go to sleep in my class very quickly because I am going to nail you with a question to see if you’re paying attention. They respond with answers that make me think yeah, they really got it this time. They really do understand it. They aren’t just guessing anymore.”

Bryan finds the Pearson textbook sets A&P I students up for success in A&P II better than their previous OER textbook. He explains that a basic understanding of chemistry is critical for A&P II. Students coming into his A&P I course rarely have taken any chemistry classes, so it’s necessary to spend time focusing on solidifying chemistry concepts.

“I think they are getting a better idea of chemistry from the Amerman textbook than they were getting from OER. (OER) is written by multiple people at multiple times. They go in there and do their little bit and it’s not easy to read. At least with the Pearson textbook...they’ve got a shot because it’s giving them something they can read, something they can understand, and the diagrams are plainly laid out.”

—Ty Bryan, Professor and Assistant Dean

“Support with Pearson is head and shoulders above what we had with OER.” Bryan never had anyone to reach out to with OER, no support to go with the textbook if he needed any type of assistance. In contrast, with Pearson, he feels he has been supported every step of the way. There was plenty of training when initially adopting Mastering with step-by-step instructions. In addition, Pearson provided him with plenty of tutorials on how to set his course up, integrate into his LMS, and troubleshoot.

“Our Pearson rep has been fabulous. She has always been available to us... For OER, I had no idea who I would have called if there was a problem. Now I have this name, a face, and get lots and lots of good support from Pearson. If I had to do it from scratch, I would still be sitting here scratching my head. Instead, I get here, do this, this, and this and it works! That has been great.”

—Ty Bryan, Professor and Assistant Dean

In their decision to move away from OER, faculty compared various publishers. They found Pearson’s textbook and the style of writing made it stand out above the others. He appreciated how it condensed the information so they could get the same concepts in a paragraph, where they had to read at least a page to get the same information with other publishers and OER. While he wishes they would, Bryan understands students don’t read a lot, so the less they have to wade through to get the same information, the better.

“Being concise, that’s the thing that really got me. I thought the text part was more cut to the chase, more of let’s give them what they need to know because they aren’t going to remember all this. Give them what they need to know right away, don’t make them dig.”

—Ty Bryan, Professor and Assistant Dean

Conclusion

When deciding to switch from OER to Pearson, Bryan and fellow faculty wanted a more effective way for students to develop a foundational knowledge of anatomy and physiology concepts that would prepare them for their clinicals. With Pearson, he finds the quality animations, diagrams, and concise wording all combine to help students be successful. As the instructor, he finds the continuous support Pearson offers to be invaluable in being able to offer his courses as seamlessly as possible.

“We decided on Pearson because the information is concise, and students aren’t going to read much. Here’s something that has good artwork, good ancillaries, good online (resources) they can get into, and great animation all built into Mastering. We opted for that.”

—Ty Bryan, Professor and Assistant Dean